

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today  
(1) was not written for publication in a law journal and  
(2) is not binding precedent of the Board.

Paper No. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte ANDREW J. KOPISH

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Appeal No. 1998-0236  
Application 08/472,536

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ON BRIEF

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Before MCCANDLISH, Senior Administrative Patent Judge, STAAB  
and MCQUADE, Administrative Patent Judges.

MCCANDLISH, Senior Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final  
rejection of claims 1 through 6, 9, 10, 14 through 26 and 28  
through 38. No other claims are pending in the application.

Appellant's invention relates to a furniture system  
(claims 1-6, 14-16 and 30-34), a post construction for a

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furniture system (claims 9 and 10), a bed construction (claims 17-26, 28 and 29) and a method of arranging a furniture system (claims 35-38). The furniture system is disclosed as having a bed section (22) and a storage section (39a, 39b) attached to corner post assemblies. Each post assembly comprises upper and lower posts (30, 34) interconnected by a connector (38).

A copy of the appealed claims is appended to appellant's brief.

The following references are relied upon by the examiner as evidence of obviousness in support of his rejections under 35 U.S.C. § 103:

Hannum	2,057,334	Oct. 13, 1936
Vivoli	3,972,638	Aug. 3, 1976
Bridge	4,027,453	Jun. 7, 1977
Tasaka	4,253,204	Mar. 3, 1981
Bianco	4,312,086	Jan. 26, 1982
Kranjec	4,607,576	Aug. 26, 1986
Nelson et al. (Nelson)	4,617,689	Oct. 21, 1986
Pottschmidt	4,745,644	May 24, 1988
Novitski	4,826,115	May 2, 1989
Gielsing et al. (Gielsing)	5,144,780	Sep. 8, 1992
Perkins	5,233,707	Aug. 10, 1993
Jory (UK)	153,699	Nov. 18, 1920

The appealed claims stand rejected under § 103 as follows:

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1. Claim 1 as unpatentable over Bianco in view of  
Bridge, Vivoli, Perkins, Pottschmidt and Nelson;

2. Claims 2, 3, 5 and 6 as unpatentable over Bianco in  
view of Bridge;

3. Claim 4 as unpatentable over Bianco in view of  
Bridge and Vivoli;

4. Claim 9 as unpatentable over Vivoli in view of  
Bridge;

5. Claim 10 as unpatentable over Vivoli in view of  
Gielsing;

6. Claims 14-16 as unpatentable over Bianco in view of  
Novitski;

7. Claim 17 as unpatentable over Pottschmidt in view of  
Hannum;

8. Claim 17 as unpatentable over Pottschmidt in view of  
Tasaka;

9. Claims 18-21 as unpatentable over Pottschmidt in  
view of Hannum, Bridge and Nelson;

10. Claims 18-21 as unpatentable over Pottschmidt in  
view of Tasaka, Bridge and Nelson;

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11. Claims 22 and 23 as unpatentable over Pottschmidt  
in view of Hannum and Nelson;

12. Claims 22 and 23 as unpatentable over Pottschmidt  
in view of Tasaka and Nelson;

13. Claims 24-26, 28 and 29 as unpatentable over Bianco  
in view of Pottschmidt, Nelson and Kranjec;

14. Claims 30-32 and 35-37 as unpatentable over Bianco  
in view of Perkins;

15. Claim 33 as unpatentable over Bianco in view of  
Bridge and Perkins;

16. Claim 34 as unpatentable over Bianco in view of  
Vivoli and Perkins; and

17. Claim 38 as unpatentable over Bianco in view of  
Perkins and Jory.

Reference is made to the examiner's answer for details  
of the foregoing rejections.

Considering first the rejections of claims 1, 24  
through 26, 28 and 29, independent claim 1 recites, inter  
alia, a bed and tabs formed at the end portions of the bed's  
side rails for removably mounting the side rails on the  
support posts. Independent claim 24 similarly recites that

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each end of each of the bed's side rails includes tabs for removably mounting the side rails on the posts.

In contrast to the invention defined in appealed claims 1 and 24, the side rails of Bianco's bed 20 are not provided with tabs for removably mounting the side rails on the patentee's corner support posts 12. Instead, the mounting tabs are provided on frame members 38 which underlie the bed's side rails to support the bed.

The examiner concedes on page 6 of the answer that the side rails of Bianco's bed lack tabs for removably mounting the side rails on the corner support posts. For this feature, the examiner relies on the Nelson patent. Nelson, however, lacks a teaching of support posts for mounting the side rails of the bed. Furthermore, the devices 36 on the side rails of Nelson's bed do not mount the side rails on the rail-supporting structure, namely the headboard and the footboard in Nelson's bed. Instead, these devices are in the form of latches for fastening the stringers 18 to the side rails. We therefore cannot agree with the examiner that the teachings of Nelson would have made it obvious to provide the side rails of

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Bianco's bed with tabs for removably mounting the side rails on Bianco's corner support posts.

Furthermore, contrary to the examiner's findings, the bed's adjacent bottom wall panels in Nelson's Figure 10 do not define a joint located over one of the stringers 18U as required in claim 1. Instead, Nelson's stringers 18U lie between

the adjacent bottom wall panels so that the panels are spaced from each other by the stringers and thus do not define joints in the usual sense.

With further regard to claim 1, we are of the viewpoint that the only way the Bridge and Vivoli references could be combined to arrive at the claimed post construction is through hindsight based on appellant's disclosure. Hindsight analysis, however, is clearly improper. In re Deminski, 796 F.2d 436, 443, 230 USPQ 313, 316 (Fed. Cir. 1986).

For the foregoing reasons alone, we cannot sustain the examiner's rejections of claims 1 and 24 and of claims 25, 26, 28 and 29 which depend from claim 24.

We also will not sustain the rejections of claims 4 and 9. As stated supra, the only way the Bridge and Vivoli

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references could be combined to arrive at the claimed post construction is through hindsight based on appellant's disclosure.

Turning now to the rejection of claim 2, there is no dispute that Bianco's frame member 38 is in the form of a bracket supporting and thus connected to a side rail of the bed. There also is no dispute that the Bianco's member 38 is formed with tabs which are removably engageable in vertical spaced slots in each support post. Thus, claim 2 differs from Bianco only by reciting that the vertically spaced slots are formed in a wall of a vertical recess in each post. Appellant has made no argument to the contrary. Instead, the only argument supporting patentability of claim 2 is that Bridge does not suggest the examiner's proposed modification of Bianco as set forth on pages 8 and 9 of the answer. We disagree.

In Bridge's post and bracket arrangement, vertically spaced slots 19 are formed in the support post 10 to receive tabs 23a, 23b on a bracket or frame 12 to support a load-receiving beam or cross piece 11. As described in Bridge's specification (see, for example, column 1, lines 20-50, and

column 3, lines 30-57), the vertically spaced slots are located in a base wall of a vertical recess 16 in the support post, and the tabs 23b are wedged against inclined side surfaces 19a and 19b of the vertical recess. According to Bridge's specification (see column 1, lines 44-50 and column 3, lines 53-57), the resulting increase in the contact area between the tabs and the post has the advantage of reducing the stress forces (referred to as contact pressure in Bridge's specification) tending to cause deformation of the tabs due to downwardly applied loads. Appellant even concedes on page 26 of the brief that Bridge's construction reduces the stress forces on the tabs or tongue elements as they are called in Bridge's specification. Such a teaching would have been ample motivation for one of ordinary skill in the art to modify Bianco's posts 12 and frame members 38 in a corresponding manner to achieve the foregoing advantage.

With regard to appellant's argument in the second full paragraph on page 26 of the brief, the fact that Bianco's frame or bracket members would require modification to achieve the advantages disclosed in the Bridge patent is of no moment because claim 2 does not require a bracket construction that



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differs from Bridge's construction. Furthermore, an end surface of Bianco's side rail will be disposed outwardly of any recess formed in the corner support post for the location of the side rail taught in the Bianco reference.

In view of the foregoing, we are satisfied that the combined teachings of the applied references would have suggested the subject matter of claim 2 to one of ordinary skill in the art to warrant a conclusion of obviousness under the test set forth in In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Accordingly, we will sustain the rejection of claim 2. We will also sustain the rejection of dependent claims 3, 5 and 6 because the patentability of these claims has not been argued separately of claim 2. See In re Nielson, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987) and In re Burckel, 592 F.2d 1175, 1178-79, 201 USPQ 67, 70 (CCPA 1979).

With regard to the rejection of claim 10, which is directed to the post structure per se, the Vivoli reference discloses a fence construction having horizontal rails 6 supported on upstanding post assemblies. Each post assembly comprises separately formed upper and lower tubular post

members 10 and 10a which are interconnected by a connector 1. The connector has upper and lower finned mounting portions 2 and a central body 3 intermediate the upper and lower finned portions 2. The upper and lower finned portions 2 respectively extend into the lower end of the upper post member 10 and upper end of the lower post member 10a. The connector's central body 3 is interposed between the adjacent ends of the upper and lower post members and has a slot 4 for receiving a tab at an adjacent end of a respective rail 6 to support the adjacent end of the rail. Thus, the basic purpose of Vivoli's connector construction is to mount the horizontal side rails of the fence.

The examiner concedes that Vivoli lacks a disclosure of appellant's claimed flanges, the interconnecting web and the mounting bosses extending outwardly from each flange to engage the internal wall structure of the post sections. He nevertheless takes the following position:

Gieling et al. teaches the use of posts(1) joined together by a "connector"(27) having "first and second mounting portions"(33) each including a "pair of flanges"(35a, 37a) interconnected by a "web"(47) and "two or more mounting bosses"(53) extending outwardly from each flange, wherein end portions of each flange and the mounting bosses engage the upper and

lower post sections in an interference fit (see Figures 2-5; column 3, lines 66-68 and column 4, lines 5-50). The skilled artisan would have found it obvious to provide the connector of Vivoli with first and second mounting portions each including a "pair of flanges" interconnected by a "web" and "two or more mounting bosses" extending outwardly from each flange, wherein end portions of each flange and the mounting bosses engage the internal wall structure of the upper and lower post sections in an interference fit in order to "provide additional support and strength to the joinder of the connected posts and provide additional strength to resist shear and torsional loading" [answer, page 13].

We cannot agree that the subject matter of claim 10 would have been obvious from the combined teachings of Vivoli and Gieling. In the first place, we cannot agree that Gieling suggests the modifications proposed by the examiner.

Furthermore, if the references were combined in the manner proposed by the examiner, we fail to see how Vivoli's central body slot 4 can be retained. Without this slot, the intended purpose of Vivoli's connector would be destroyed.

Still further, the modifications proposed by the examiner would not arrive at the invention defined in claim 10 as required in In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Contrary to the examiner's position as quoted supra, Gieling's tabs 57 (identified as "mounting

bosses" by the examiner) do not extend outwardly from the elements 35a and 37a which the examiner regards as "flanges." Instead, tabs 57 extend from Gieling's arms 53, and there is only one tab extending from each arm. In contrast, claim 10 expressly recites that two or more of the mounting bosses (which engage the internal wall structure of the post sections) extend outwardly from each of the connector's flanges. Furthermore, Gieling's disclosure that each of the tabs 57 fits securely in an aperture 23 (see column 4, lines 46-47) does not necessarily mean that the fit is an interference fit. In contrast, claim 10 recites that the mounting bosses engage the internal wall structure of the post sections with an interference fit.

For the foregoing reasons, we will not sustain the rejection of claim 10.

Turning now to the rejection of claim 15, the only argument supporting patentability of this claim over the examiner's proposed combination of Bianco and Novitski is that "Novitski clearly shows the tabs being formed on a base 17 which is in the same plane as the end wall of the cabinet, and

which does not extend outwardly of the end wall, as claimed" (brief, page 31). This argument is unpersuasive.

Claim 15 recites that the end portions defining the slot-engaging tabs "extend outwardly of the end walls" of the furniture component without limitation as to the direction in which the end portions extend from the end walls. As such claim 15 is broad enough to encompass end portions which extend in any direction from the end walls, including the direction in which the end portions extend from back edges of the end walls in a direction parallel to planes containing the end walls.

In Novitski's furniture system, the back wall's base 17 extends outwardly from the back edge of the cabinet's side walls or end walls, as appellant describes them. Thus, when the claim language is given its broadest reasonable interpretation (See In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)) without reading limitations from the specification into the claim (See In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) and Sjolund v. Musland, 847 F.2d 1573, 1581-82, 6 USPQ2d 2020, 2027 (Fed. Cir. 1988)), the recitation that the end portions

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extend outwardly of the end walls does not distinguish from Novitski.

Furthermore, Novitski discloses all of the other elements of claim 15 (namely the pair of supports in the form of posts 9 and the furniture component in the form of cabinet 3 having end walls and a back wall). As such the subject matter does not distinguish from Novitski. The rejection of this claim under

§ 103 is nonetheless proper since anticipation is the epitome of obviousness. See In re May, 574 F.2d 1082, 1089, 197 USPQ 601, 607 (CCPA 1978). Accordingly, we will sustain the rejection of claim 15. We will also sustain the rejection of dependent claims 14 and 16 since the patentability of these claims has not been argued separately of claim 15. See In re Nielson, 816 F.2d at 1572, 2 USPQ2d at 1528 and In re Burckel, 592 F.2d at 1178-79, 201 USPQ at 70.

With regard to the two rejections of claim 17, neither Hannum nor Tasaka teaches or suggests appellant's claimed bed construction in which a joint between adjacent bottom wall panels is located over a cross member interconnecting the bed's side rails. Hannum even lacks a disclosure of a bed.

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In any case, there is no teaching in this reference that the joint between the hinged table top panels 39 overlies the cross piece 28 of the table's frame. Tasaka, on the other hand, does disclose a bed construction, but there is no teaching in this reference of any stringers or cross members underlying the bottom wall panels 11.

For the foregoing reasons, we cannot sustain the two rejections of claim 17. For the same reasons we cannot sustain the rejections of claims 18 through 23 which depend directly or indirectly from claim 17. As noted supra with regard to the rejection of claim 1, Nelson does not rectify the foregoing shortcomings of Hannum and Tasaka.

With regard to claim 30, Bianco discloses an upper bed section and a lower furniture section having furniture components such as storage drawers 26 and dresser 28. However, Bianco concededly lacks a teaching of providing separable post assemblies for removably mounting the upper bed section 20 on the lower furniture section.

Perkins, however, teaches a modular furniture system having upper and lower furniture sections 12 and 14 supported on corner post assemblies. Each of the post assemblies

comprises a lower post 14 and an upper post 16 aligned with the lower post and detachably supported on the lower post by a connector 34. The upper furniture section 12 is therefore removably mounted on the lower section 14 to permit the two furniture sections to be separated as shown in Figure 2 of the Perkins patent to provide flexibility and convenience to a user (see column 1, lines 15-18 of the Perkins specification). Such a teaching would have been ample motivation for one of ordinary skill in the art to substitute Perkins' post assemblies (12, 14, 34) for Bianco's corner support posts 12 to removable mount the upper bed section on the lower furniture section. In addition, Perkins suggests the provision of not one but four side rails 18 for each of the upper and lower sections for the self-evident purpose of reinforcing the support frame structure.

With regard to appellant's arguments on page 37 of the brief, the fact that both of Perkins' upper and lower furniture sections are shown to be bunk beds does not detract from the obviousness of substituting Perkins' posts assemblies for Bianco's support posts as discussed supra. In the first place, bunk beds are furniture components. Thus, the



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recitation in claim 30 of "furniture components" is broad enough to read on the components of Perkins' lower bunk bed. In addition, Perkins recognizes in column 1, lines 19-23, that the modular design of separable furniture sections is applicable to different types of furniture and that bunk beds are but one type of such modular furniture systems. Furthermore, Bianco's teaches the concept of utilizing components other than bed in the lower furniture section. In this regard, Bianco's teachings cannot be ignored, for the test for obviousness is not what the references exclusively or individually teach. Instead, the test is what the references would have collectively suggested to one of ordinary skill in the art. See Keller, 642 F.2d at 425, 208 USPQ at 881.

Furthermore, claim 30 is broad enough to read on Perkins alone because the recitation of the furniture components is broad enough to read on Perkins' lower plural component bunk assembly.

For the foregoing reasons, we will sustain the rejection of claim 30. We will also sustain the rejection of dependent claims 31 through 34 since the patentability of these claims has not been argued separately of claim 30. See In re

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Nielson, 816 F.2d at 1572, 2 USPQ2d at 1528 and In re Burckel, 592 F.2d at 1178-79, 201 USPQ at 70.

With regard to claim 35, Perkins suggests the concept of providing upper and lower support posts detachably interconnected by connectors for removably mounting an upper furniture section on a lower furniture section for the reasons discussed supra with respect to claim 30. In fact, based on our analysis of Perkins, this reference teaches all of the claimed steps in claim 35, namely the step of providing the bed section (in the form of the upper bunk), the step of providing the furniture-mounting section (in the form of lower support posts 14) together with a rail member (in the form of one of the lower rails 18) and the plurality of furniture components (in the form of the plural component lower bunk assembly), the step of selectively assembling the bed section and the furniture-mounting section together by means of the connectors 34 as shown in Figure 1 of the Perkins patent, and the step of moving the bed section apart from the furniture-mounting section by removing the connectors as shown in Figure 2 of the Perkins patent.

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For the foregoing reasons, we will sustain the rejection of claim 35. We will also sustain the rejection of dependent claims 36 through 38 since the patentability of these claims has not been argued separately of claim 35. See In re Nielson, 816 F.2d at 1572, 2 USPQ2d at 1528 and In re Burckel, 592 F.2d at 1178-79, 201 USPQ at 70.

In summary, we have (1) affirmed the examiner's rejections of claims 2, 3, 5, 6, 14 through 16 and 30 through 38 and (2) reversed the examiner's rejections claims 1, 4, 9, 10, 17 through 26, 28 and 29. The examiner's decision rejecting the appealed claims is affirmed in part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

Harrison E. McCandlish, Senior )  
Administrative Patent Judge )  
)

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	John P. McQuade	)	
	Administrative Patent Judge	)	

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ANDRUS, SCEALES, STARKE & SAWALL  
Suite 1100  
100 East Wisconsin Avenue  
Milwaukee, WI 53202